Schedule B23
Type Certificates

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

E00001SC
REVISION: 2

Superior Air Parts Engines
O-360-A1A1, A1A2, A2A1, A2A2, A3A1, A3A2, B1A1, B1A2, B2A1, B2A2, B3A1, B3A2, B4A1, B4A2, B5A1, B5A2, B6A1, B6A2, C1A1, C1A2, C2A1, C2A2, C2A1, C3A2, D1A1, D1A2, D2A1, D2A2, D3A1, D3A2, D4A1, D4A2, D5A1, D5A2, D6A1, D6A2, E1A1, E1A2, E2A1, E2A2, E3A1, E3A2
IO-360-A1A1, A1A2, A2A1, A2A2, A3A1, A3A2, B1A1, B1A2, B2A1, B2A2, B3A1, B3A2, B4A1, B4A2, B5A1, B5A2, B6A1, B6A2, C1A1, C1A2, C2A1, C2A2, C2A1, C3A2, D1A1, D1A2, D2A1, D2A2, D3A1, D3A2, D4A1, D4A2, D5A1, D5A2, D6A1, D6A2, E1A1, E1A2, E2A1, E2A2, E3A1, E3A2

October 19, 2007

TYPE CERTIFICATE DATA SHEET NO. E00001SC

Engines of models described herein conforming with this data sheet (which is part of Type Certificate No. E00001SC) and other approved data on file with the Federal Aviation Administration meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated, and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder: Superior Air Parts, Inc.
621 South Royal Lane, Suite 100
Coppell, TX 75019

Model	**O-360-**A1A2, A2A2, A3A2	**O-360-**B1A2, B2A2, B3A2, B4A2, B5A2, B6A2, C1A2, C2A2, C3A2	**O-360-**D1A2, D2A2, D3A2, D4A2, D5A2, D6A2	**O-360-**E1A2, E2A2, E3A2
Type	4HOA	— —	— —	— —
Rating U.S. Standard Atmosphere and ICAO at Sea Level Pressure Altitude				
Take-Off/Max. Continuous HP	180	— —	— —	— —
Take-Off/Max. Continuous RPM	2700	— —	— —	— —
Take-Off/Max. Cont. Manifold Press. – in Hg	29.5	— —	— —	— —
Fuel Aviation Gasoline	ASTM D910, Min Grade 91/98 (lead optional)	— —	— —	— —
Motor Gasoline (R+M/2) (See Note 7)	ASTM D4814, Min Octane 91 (no alcohol)	— —	— —	— —
Lubricating Oil	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Bore and Stroke – in	5.125 x 4.375	— —	— —	— —
Displacement – cubic in	361	— —	— —	— —
Compression Ratio	8.5:1	— —	— —	— —

Model	**O-360**-A1A2, A2A2, A3A2	**O-360**-B1A2, B2A2, B3A2, B4A2, B5A2, B6A2, C1A2, C2A2, C3A2	**O-360**-D1A2, D2A2, D3A2, D4A2, D5A2, D6A2	**O-360**-E1A2, E2A2, E3A2
Weight (Basic Engine, Dry) – lbs See Installation & Operation Manual, SVIOM01, for detailed model weights	288	291	294	295
C.G. Location (Basic Engine)	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Principal Dimensions – in (Height x Width x Length)	24.6 x 33.4 x 32.8	— —	— —	— —
Propeller Shaft	Direct, SAE Modified Type 2 per AS127	— —	— —	— —
Fuel System	Precision Airmotive Carburetor MA-4-5 type	— —	— —	— —
Ignition – Two Magnetos	Unison Impulse Magnetos 4371 with the appropriate ignition harness	— —	— —	— —
Timing – °BTC	R: 25°, L: 25°	— —	— —	— —
Spark Plugs	Champion REM40E, Unison UREM40E	— —	— —	— —
Oil Sump Capacity	8 quarts; 6 qts. usable at 20° noseup, and 6.5 qts. usable at 10° nosedown attitudes	— —	— —	— —

— — indicates "same as preceding model"

Model	**O-360**-A1A1, A2A1, A3A1	**O-360**-B1A1, B2A1, B3A1, B4A1, B5A1, B6A1, C1A1, C2A1, C3A1	**O-360**-D1A1, D2A1, D3A1, D4A1, D5A1, D6A1	**O-360**-E1A1, E2A1, E3A1
Type	4HOA	— —	— —	— —
Rating U.S. Standard Atmosphere and ICAO at Sea Level Pressure Altitude				
Take-Off/Max. Continuous HP	168	— —	— —	— —
Take-Off/Max. Continuous RPM	2700	— —	— —	— —
Take-Off/Max. Cont. Manifold Press. – in Hg	29.5	— —	— —	— —
Fuel Aviation Gasoline	ASTM D910, Min Grade 91/98 (lead optional)	— —	— —	— —
Motor Gasoline (R+M/2) (See Note 7)	ASTM D4814, Min Octane 91 (no alcohol)	— —	— —	— —
Lubricating Oil	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Bore and Stroke – in	5.125 x 4.375	— —	— —	— —
Displacement – cubic in	361	— —	— —	— —
Compression Ratio	7.2:1	— —	— —	— —
Weight (Basic Engine, Dry) – lbs See Installation & Operation Manual, SVIOM01, for detailed model weights	288	291	294	295
C.G. Location (Basic Engine)	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Principal Dimensions – in (Height x Width x Length)	24.6 x 33.4 x 32.8	— —	— —	— —

Model	**O-360**-A1A1, A2A1, A3A1	**O-360**-B1A1, B2A1, B3A1, B4A1, B5A1, B6A1, C1A1, C2A1, C3A1	**O-360**-D1A1, D2A1, D3A1, D4A1, D5A1, D6A1	**O-360**-E1A1, E2A1, E3A1
Propeller Shaft	Direct, SAE Modified Type 2 per AS127	— —	— —	— —
Fuel System	Precision Airmotive Carburetor MA-4-5 type	— —	— —	— —
Ignition – Two Magnetos	Unison Impulse Magnetos 4371 with the appropriate ignition harness	— —	— —	— —
Timing – °BTC	R: 25°, L: 25°	— —	— —	— —
Spark Plugs	Champion REM40E, Unison UREM40E	— —	— —	— —
Oil Sump Capacity	8 quarts; 6 qts. usable at 20° noseup, and 6.5 qts. usable at 10° nosedown attitudes	— —	— —	— —

— — indicates "same as preceding model"

Model	**IO-360**-A1A2, A2A2, A3A2	**IO-360**-B1A2, B2A2, B3A2, B4A2, B5A2, B6A2, C1A2, C2A2, C3A2	**IO-360**-D1A2, D2A2, D3A2, D4A2, D5A2, D6A2	**IO-360**-E1A2, E2A2, E3A2
Type	4HOA	— —	— —	— —
Rating U.S. Standard Atmosphere and ICAO at Sea Level Pressure Altitude Take-Off/Max. Continuous HP Take-Off/Max. Continuous RPM Take-Off/Max. Cont. Manifold Press. – in Hg	 180 2700 29.5	 — — — — — —	 — — — — — —	 — — — — — —
Fuel Aviation Gasoline Motor Gasoline (R+M/2) (See Note 7)	 ASTM D910, Min Grade 91/98 (lead optional) ASTM D4814, Min Octane 91 (no alcohol)	 — — — —	 — — — —	 — — — —
Lubricating Oil	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Bore and Stroke – in	5.125 x 4.375	— —	— —	— —
Displacement – cubic in	361	— —	— —	— —
Compression Ratio	8.5:1	— —	— —	— —
Weight (Basic Engine, Dry) – lbs See Installation & Operation Manual, SVIOM01, for detailed model weights	290	293	296	297
C.G. Location (Basic Engine)	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Principal Dimensions – in (Height x Width x Length)	24.0 x 33.4 x 32.8	— —	— —	— —
Propeller Shaft	Direct, SAE Modified Type 2 per AS127	— —	— —	— —
Fuel System	Precision Airmotive Fuel Injection RSA-5 type	— —	— —	— —
Ignition – Two Magnetos	Unison Impulse Magnetos 4371 with the appropriate ignition harness	— —	— —	— —

Model	**IO-360**-A1A2, A2A2, A3A2	**IO-360**-B1A2, B2A2, B3A2, B4A2, B5A2, B6A2, C1A2, C2A2, C3A2	**IO-360**-D1A2, D2A2, D3A2, D4A2, D5A2, D6A2	**IO-360**-E1A2, E2A2, E3A2
Timing – °BTC	R: 25°, L: 25°	— —	— —	— —
Spark Plugs	Champion REM40E, Unison UREM40E	— —	— —	— —
Oil Sump Capacity	8 quarts; 6 qts. usable at 20° noseup, and 6.5 qts. usable at 10° nosedown attitudes	— —	— —	— —

— — indicates "same as preceding model"

Model	**IO-360**-A1A1, A2A1, A3A1	**IO-360**-B1A1, B2A1, B3A1, B4A1, B5A1, B6A1, C1A1, C2A1, C3A1	**IO-360**-D1A1, D2A1, D3A1, D4A1, D5A1, D6A1	**IO-360**-E1A1, E2A1, E3A1
Type	4HOA	— —	— —	— —
Rating U.S. Standard Atmosphere and ICAO at Sea Level Pressure Altitude Take-Off/Max. Continuous HP Take-Off/Max. Continuous RPM Take-Off/Max. Cont. Manifold Press. – in Hg	 168 2700 29.5	 — — — — — —	 — — — — — —	 — — — — — —
Fuel Aviation Gasoline Motor Gasoline (R+M/2) (See Note 7)	 ASTM D910, Min Grade 91/98 (lead optional) ASTM D4814, Min Octane 91 (no alcohol)	 — — — —	 — — — —	 — — — —
Lubricating Oil	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Bore and Stroke – in	5.125 x 4.375	— —	— —	— —
Displacement – cubic in	361	— —	— —	— —
Compression Ratio	7.2:1	— —	— —	— —
Weight (Basic Engine, Dry) – lbs See Installation & Operation Manual, SVIOM01, for detailed model weights	290	293	296	297
C.G. Location (Basic Engine)	See Installation & Operation Manual, SVIOM01	— —	— —	— —
Principal Dimensions – in (Height x Width x Length)	24.0 x 33.4 x 32.8	— —	— —	— —
Propeller Shaft	Direct, SAE Modified Type 2 per AS127	— —	— —	— —
Fuel System	Precision Airmotive Fuel Injection RSA-5 type	— —	— —	— —
Ignition – Two Magnetos	Unison Impulse Magnetos 4371 with the appropriate ignition harness	— —	— —	— —
Timing – °BTC	R: 25°, L: 25°	— —	— —	— —
Spark Plugs	Champion REM40E, Unison UREM40E	— —	— —	— —
Oil Sump Capacity	8 quarts; 6 qts. usable at 20° noseup, and 6.5 qts. usable at 10° nosedown attitudes	— —	— —	— —

— — indicates "same as preceding model"

CERTIFICATION BASIS: FAR 33 Through Amendment 20, effective 12/13/2000
PRODUCTION BASIS: Production Certificate 14SW

		O-360	IO-360
NOTE 1.	Maximum Permissible Temperatures		
	Oil at Engine Inlet	240° F	— —
	Cylinder Head Temperature	500° F	— —
NOTE 2.	Fuel Pressure Limits		
	Inlet to Pump, Min.	+0.5 psig	-2 psig
	Max.	+8 psig	+35 psig
NOTE 3.	Oil Pressure Limits into Engine		
	Normal	55-95 psig	— —
	Idle	20 psig	— —
	Max (Cold Oil)	115 psig	— —

— — indicates "same as preceding model"

NOTE 4. The following accessory drive or mounting provisions are available:

Accessory	Direction of Rotation*	Drive Ratio to Crankshaft	Max. Torque (in-lbs) Continuous	Max. Torque (in-lbs) Static	Max. Overhang Moment (in-lbs)
Tachometer	CW	0.5:1	7	50	5
Starter	CCW	16.56:1	N/A	450	150
Alternator (not supplied)	CW	3.25:1	60	120	175
Propeller Governor, Rear**	CW	0.866:1	125	825	40
Propeller Governor, Front**	CW	0.895:1	125	825	40
Fuel Pump	Reciprocating	0.5:1	N/A	N/A	10
Accessory Drive***	CCW	1.3:1	70	450	25

* "CW" – Clockwise; and "CCW" – Counterclockwise (Viewing Drive Pad)
** This is an AND20010 drive pad and only applicable to models with provisions to control propeller pitch and shall be supplied with a cover.
*** This is an AND20000 drive pad and shall be supplied with a cover.

NOTE 5. The O-360 and IO-360 engines' detailed model designation includes a model suffix, which denotes details about the engine configuration in the format: O or IO-360-(letter)(number)(letter)(number). The first suffix digit is a letter which designates the crankshaft/propeller configuration: with 'A' designating provisions for a fixed pitch propeller, with a thin-wall front main bearing journal, 'B' designating provisions to control propeller pitch with pressurized oil, with a thin-wall front main bearing journal, 'C' designating provisions for a fixed pitch propeller, with a heavy-wall front main bearing journal, 'D' designating provisions to control propeller pitch with pressurized oil, with a heavy-wall front main bearing journal and 'E' designating provisions for a fixed pitch propeller , with a solid front main bearing journal. The second suffix digit is a number which designates crankcase/engine mount configuration: with '1' designating a #1 dynafocal engine mount type, '2' designating a #2 dynafocal engine mount type, '3' designating a conical engine mount type, '4' designating a #1 dynafocal engine mount with a crankcase utilizing a front mount prop governor, '5' designating a #2 dynafocal engine mount with a crankcase utilizing a front mount prop governor, and '6' designating a conical engine mount with a crankcase utilizing a front mount prop governor. The third suffix digit is a letter which designates accessory configuration, with 'A' being the only configuration. The last digit is a number designating power rating/compression ratio: with '1' being the low-compression configuration and with '2' being the high-compression configuration.

NOTE 6. Initial TBO of 1000 Hours

NOTE 7. Experience has shown that there is a higher probability of vapor locking on aircraft, especially on those equipped with fuel injected reciprocating engines when operating with high volatility fuels such as motor gasoline. Aircraft fuel system designs for the powerplant installation of these engines may need to incorporate special design features or enhanced cooling to accommodate operation with high volatility fuels such as motor gasoline. The aircraft fuel system hot weather testing requirements of FAR 23.961 must be successfully accomplished for each aircraft powerplant installation design of these engines (both carbureted and fuel injected) to obtain approval for operation with motor gasoline, reference AC 23.1521-1B.

...END...

United States of America
Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SE8193SW

This certificate, issued to Superior Air Parts, Inc.
P. O. Box 363
Addison, TX 75001

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 of the CAR Regulations.

Original Product — Type Certificate Number See page 2
Make Textron Lycoming
Model See page 2

Description of Type Design Change:

Grind nitrided high compression cylinder barrels to plus .010 oversize and install SL75089 P10 Piston, SL74241 P10 Compression Ring, and SL 73857 P10 Oil Ring in accordance with Superior Air Parts, Inc., Service letter No. 92-003 dated April 22, 1992, or latter FAA approved revisions.

Limitations and Conditions:

Plus 10 piston and piston rings should be installed in complete engine sets (All cylinders). Compatibility of this modification with previously installed equipment must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: June 27, 1991
Date of issuance: April 27, 1992

Date reissued:
Date amended:

By direction of the Administrator

Mark R. Schilling

(Signature)

Mark R. Schilling, Manager
Special Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SE8193SW

The following engines and their respective Type Certificate Numbers are eligible for this installation:

Type Certificate Number E-274 -
O-320-B1A, B1B, B2B, B2C, B3B, B3C, D1A, D1AD, D2A, D2B, D1C, D2C, D1D, D1F, D2G, D3G, D2J.

Type Certificate Number 1E12 -
IO-320-B1A, B2A, B1C, B1D, B1E, C1A, C1B, C1F, D1A, D1AD, D1B. LIO-320-B1A, C1A. AIO-320-A1B, B1B, C1B. AEIO-320-D1B, D2B.

Type Certificate Number E-277 -
O-340-A1A, A1B, A2A.

Type Certificate Number E-286 -
O-360-A1A, A1AD, A1C, A1D, A1F, A1F6, A1F6D, A1G, A1G6, A1G6D, A1H, A1H6, A1J, A1LD, A2A, A3A, A3AD, A4A, A4AD, A5AD, A2D, A4D, A2E, A2F, A2G, A4G, A4J, A4JD, A4K, A4M, A4N, C1A, C1C, C2A, C2C, C2D, C1E, C2E, C1F, C1G, F1A6, G1A6. HO-360-A1A, B1A, B1B. LO-360-A1G6D,A1H6.

Type Certificate Number 1E10 -
IO-360-B1A, B1B, B1BD, B1D, B1E, B1F, B2E, B2F, B2F6, B4A. HIO-360-B1A. AEIO-360-B1B, B1F, B2F, B4A, B1G6, H1A.

Type Certificate Number 1E1 -
IVO-360-A1A. VO-360-A1A, A1B, B1A.

Type Certificate Number E-295 -
O-540-A1A, A1A5, A4A5, A1B5, A4B5, A1C5, A4C5, A1D, A1D5, A4D5, A2B, A3D5, E4A5, E1A, E4B5, E4B5D, E4C5, F1A5, F1B5, G1A5, G1A5D, G2A5, H1B5D, H2B5D, L3C5D.

Type Certificate Number 1E4 -
IO-540-C1B5, C4B5, C4B5D, C1C5, C4C5, C4D5D, C2C, D4A5, D4B5, D4C5, J4A5, R1A5, N1A5, N1A5D, T4A5, T4B5D, T4C5D, V4A5D. AEIO-540-D4A5, D4B5.

Type Certificate Number E14EA -
TIO-540-G1A.

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8110-2-1 (10-69) *This certificate may be transferred in accordance with FAR 21.47.*

C FAA AC 82-03578

United States of America
Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SE7674SW

This certificate, issued to Superior Air Parts, Inc.
P. O. Box 363
Addison, TX 75001

certifies that the change in the type design for the following product with the limitations and conditions thereof as specified hereon meets the airworthiness requirements of Part 33 of the Federal Aviation Regulations.

Original Product — Type Certificate Number:

Make: Textron Lycoming

Model: See continuation sheet page 3 of this STC.

Description of Type Design Change:

Grind nitrided cylinder barrels to .010 and install SL10545P10 plus .010 over size pistons, SL74241P10compression rings and SL73857P10 Oil Control Rings as specified in Superior Air Parts Service letter No. 89-005A dated January 22, 1990, or later FAA approved data.

Limitations and Conditions:

Compatability of this modification with previously installed equipment must be determined by installer. Plus .010 pistons and rings should be installed in complete sets.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: July 21, 1989

Date reissued:

Date of issuance: November 20, 1989

Date amended: 03/02/90 Rev. 1, 09/27/90 Rev. 2 Rev.

By direction of the Administrator

Mark R. Schilling
(Signature)

Mark R. Schilling, Manager
Special Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47

FAA Form 8110-2 (10-68)

United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SE7674SW Rev. 2

The following is a list of eligable engines and the respective Type Certificates.

TYPE CERTIFICATE NUMBER:	Engine Model
E2628	TO-360-C1A6D, TO-360-F1A6D
E16E4	TIO-360-A1B, TIO-360-A3B6, TIO-360-C1A6D
1E4	IO-540-AA1A5
E14EA	TIO-540-A1A, TIO-540-A1B TIO-540-A2A, TIO-540-A2B TIO-540-A2C TIO-540-F2BD TIO-540-J2B, TIO-540-J2BD TIO-540-N2BD, TIO-50-R2AD TIO-540-S1AD, TIO-540-U2A TIO-540-V2AD, LTIO-540-F2BD LTIO-540-J2B, LTIO-540-J2BD LTIO-540-N2BD, LTIO-54-R2BD LTIO-540-U2A, LTIO-540-V2AD
E19EA	TIGO-541-D1B, TIGO-541-E1A
E1DEA	TIO-541-A1A, TIO-541-E1A4 TIO-541-E1B4, TIO-541-E1C4 TIO-541-E1D4,

--end--

...ification of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

...8-2-1 (10-69) *This certificate may be transferred in accordance with FAR 21.47*

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SE5945SW

This certificate, issued to: Superior Air Parts, Inc.
15050 Beltwood Parkway East
Addison, Texas 75001

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations.

Original Product — Type Certificate Number: E-223

Make: Avco Lycoming

Model: O-235-K, L, M, N, P Series

Description of Type Design Change:

Grind nitrided choked engine cylinders .010" oversize and install .010" oversize pistons and rings as specified in Superior Air Parts Service Letter No. 85-005 dated June 18, 1985, or later FAA approved revision.

Limitations and Conditions:

Compatibility of this modification with other previously approved modifications must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: May 30, 1985

Date of issuance: June 18, 1985

Date reissued:

Date amended:

By direction of the Administrator

Don P. Watson (Signature)

Manager, Aircraft Certification Division
Southwest Region

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

United States Of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE7582SW

This Certificate issued to Superior Air Parts, Inc.
621 South Royal Lane
Coppell, TX 75019

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations.

Original Product Type Certificate Number: See attached FAA Approved

Make: Model List (AML) for list of approved models

Model: And applicable airworthiness regulations.

Description of Type Design Change:
Grinding of high compression NITRIDED Cylinders to .010 oversize, as an alternative to chrome plating or rebarreling, and the installation of SL75089 P10 Piston, SL74241 P10 Top and second compression ring, and SL 73857 P10 oil control ring in accordance with Superior Air Parts, Inc. Service letter No. L89-04 D dated August 20, 2008 or later FAA approved revision.

Limitations and Conditions:
The installer must determine whether this design change is compatible with previously approved modifications. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: August 15, 1988

Date of issuance: April 11, 1989

Date reissued:

Date amended: September 9, 2008, Revision 1

By direction of the Administrator

(*Signature*)
S. Frances Cox, Manager
Special Certification Office
Southwest Region

(*Title*)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA APPROVED MODEL LIST (AML)

STC No. SE7582SW

Superior Air Parts, Inc.
621 South Royal Lane
Coppell, TX 75019

Date of Issuance: April 11, 1989
Date amended: September 8, 2008 Revision 1

Item	Engine Make	Engine Models	Original Type Certificate Number	Regulation/ Part
1	IO-360	-A1A, -A1B, -A1B6, -A1B6D, -A1C, -A1D, -A1D6, -A1D6D, -A2A, -A2B, -A2C, -A3B6, -A3B6D, - A3D6D, -C1A, -C1B, -C1C, -C1C6, -C1D6, -C1E6, -C1E6D, -C1F, -C1G6, -D1A, -J1AD, -J1A6D, -K2A	1E10	CAR 13
2	AIO-360	-A1A, -A1B, -A2A, -A2B, -B1B	1E10	CAR 13
3	AEIO-360	-C1E6	1E10	CAR 13
4	HIO-360	-A1A, -A1B, -C1A, -C1B	1E10	CAR 13
5	LHIO-360	-C1A, -C1B	1E10	CAR 13
6	GO-480	-C1B6, -C1D6, -C2C6, -C2D6, -C2E6, -G1A6, -G1B6, -G1D6, -G1H6, -G1J6, -G2D6, -G2F6	E275	CAR 13
7	IGO-480	-A1A6, -A1B6	E275	CAR 13
8	IO-540	-A1A5, -B1A5, -B1B5, -B1C5, -E1A5, -E1B5, -E1C5, -G1A5, -G1B5, -G1C5, -G1D5, -G1E5, -G1F5, -K1A5, -K1A5D, -K1B5, -K1B5D, -K1C5, -K1D5, -K1E5, -K1E5D, -K1F5, -K1F5D, -K1G5, -K1G5D, -K1H5, -K1J5, -K1J5D, -K1K5, -K2A5, -L1A5, -L1A5D, -L1B5D, -L1C5, -M1A5, -M1A5D, -M1B5D, -M1C5, -M2A5D, -P1A5, -S1A5, -U1A5D, -U1B5D, -AC1A5, -AE1A5	1E4	CAR 13
9	HIO-540	-A1A	1E4	CAR 13
10	AEIO-540	-L1B5, -L1B5D, -L1D5	1E4	CAR 13
11	IGO-540	-A1A, -A1B, -A1C, -B1A, -B1A, -B1B, -B1C	1E11	CAR 13
12	VO-540	-C1A, -C1B, -C1C3, -C2A, -C2B, -C2C	E-304	CAR 13
13	IVO-540	-A1A	E11EA	CAR 13
14	IO-720	-A1A, -A1B, -A1BD, -B1A, -B1B, - B1BD, -C1B, -C1BD, -D1B, -D1BD, -D1C, -D1CD	1E15	CAR 13

FAA Approved: _____

S. Frances Cox
Manager, Special Certification Office,
Southwest Region

Date: _____

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SE7582SW

This certificate, issued to

Superior Air Parts, Inc.
P. O. Box 363
Addison, TX 75001

certifies that the change in the type design for the following product with the limitations and conditions thereof as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations.

Original Product — Type Certificate Number: Page 2

Make: Textron Lycoming

Model: See Page 2

Description of Type Design Change:

Grinding of high compression NITRIDED Cylinders to .010 oversize, as an alternative to chrome plating or rebarreling, and the installation of SL10207 P10 Piston, SL74241 P10 Top and second compression ring, and SL73857 P10 oil control ring in accordancewith Superior Air Parts, Inc. procedure for gringing high compression NItrided cylinder barrales and installation of .010 oversize pistons and rings, dated 8/15/88, or later FAA approved revision. See Continuation Sheet

Limitations and Conditions

Compatibility of this modification with previously installed equipment must be determined by installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: August 15, 1988

Date of issuance: April 11, 1989

Date reissued:

Date amended:

By direction of the Administrator

(Signature)

for L. B. Andriesen
Manager, Rotorcraft Directorate,
Aircraft Certification Service

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

United States of America
Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SE7582SW

Limitations and Conditions (Continued):

The following engines and their respective Type Certificate Numbers are eligible for this installation:

Type Certificate Number 1E10 -

IO-360-A1a, A1B, A1B6, A1B6D, A1C, A1C6, A1D, A1D6, A2A, A2B, A2C, C1A, C1B, C1C, C1C6, C1D6, C1E6, C1E6D, D1A, C1F, J1A6D, K2A, A3B6D. A10-360-A1A, A1B, B1B. AEIO-360-A1A, A1B, A1B6, A1D, A1E, A2B. LIO-360-C1E, C1E6, C1E6D. HIO-360-A1A, C1A, C1B. LHIO-360-C1A.

Type Certificate Number E-275-10 -

GO-480-C1B6, C1D6, C2 SERIES, G2D6, G2F6, G1A6, G1AG(HELIO), G1B6, G1D6(HELIO), G1D6, G1E6, G1F6, G1G6, G1J6. IGO-480-A1B6(HELIO).

Type Certificate Number 1E4-11 -

IO-540-M1A5, E1B5, A1A5, G1A5, G1B5, G1C5, G1D5, G1E5, K1A5, K1B5, K1D5, K1F5, L1A5, B1A5, B1C5, E1A5, E1B5, G1F5, K1C5, K1E5, P1A5, S1A5, K1A5D, K1F5D, K1G5, K1G5D, K1H5, K1J5, K1J5D, K1K5, L1A5D. HIO-540-A1A. AEIO-540-L1B5D. IO-540-M1A5D, M1B5, M1B5D, U1A5D, U1B5D, K1E5D, S1A5.

Type Certificate Number 1 E11-5 -

IGO-540-A1A, A1C, B1A, B1C.

Type Certificate Number E-304-6 -

VO-540-C1A, C1B, C1C3, C2A, C2C.

Type Certificate Number E-11EA-2 -

IVO-540-A1A.

Type Certificate Number 1E15-5 -

IO-720-A1A, D1B, A1B, B1B, C1B, D1B, B1BD, D1C, D1CD

END

Falsification of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both

AC 8110-2-1 (10-69) *This certificate may be transferred in accordance with FAR 21.47*

United States of America
Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SE8675SW

This certificate, issued to Superior Air Parts, Inc.
P. O. Box 363
Addison, TX 75001

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations.

Original Product — Type Certificate Number: E-252
Make: Teledyne
Model: O-200

Description of Type Design Change:
The magneto timing for the Teledyne Continental Motors O-200 engine to be set at 28 degrees before top dead center (BTC). The setting is to be made in accordance with Superior Air Parts, Inc. Service Letter 93-004, dated 08/24/93.

Limitations and Conditions:
The magneto timing may be set at 28 degrees BTC only when Four Superior Air Parts, Inc. SA10200 Series Millinnium O-200 cylinders are installed in the Teledyne Contenintal O-200 engine. Compatibility of this modification with previously installed equipment must be determined by installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: July 1, 1993
Date reissued:
Date of issuance: August 24, 1993
Date amended:

By direction of the Administrator

Mark R. Schilling
(Signature)

Mark R. Schilling, Manager
Special Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.62.

FAA Form 8110-2 (10-88)

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE09014SC

This Certificate issued to Superior Air Parts, Inc.
14280 Gillis Road
Dallas, TX 75244-3792

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 of the Civil Air Regulations.

Original Product - Type Certificate Number: E-205

Make: Teledyne Continental

Model: A-65-1,A-65-3,A-65-6,A-65-7,A-65-8,A-65-9
A-65-12,A-65-14

Description of Type Design Change:
Installation of Superior Air Parts, Inc. Millennium series Cylinder Power Assemblies Part Number SA65000-A20P in accordance with Superior Air Parts, Inc. Service Letter No. 95-009, dated 06/30/95, manufactured in accordance with Superior Air Parts, Inc. Drawing No. SA65000SO, I.R., dated 2/24/95, or later FAA approved revision.

Limitations and Conditions: Installation of Superior Air Parts Cylinder assemblies must be installed in complete sets of four and can not be intermixed with the Teledyne cylinder assemblies. An Airframe STC is not required for installation of an engine modified by this STC. Compatibility of this design change with previously approved modifications must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 30, 1993

Date of issuance: March 13, 1995

Date reissued:

Date amended: September 15, 1995, Rev. 1

By direction of the Administrator

(Signature)

A. J. Merrill
Manager, Special Certification Office
Southwest Region

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA Form 8110-2(10-68)

This certificate may be transferred in accordance with FAR 21.47.

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE09014SC

This Certificate issued to Superior Air Parts, Inc.
14280 Gillis Road
Dallas, TX 75244-3792

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 *of the* Civil Air *Regulations.*

Original Product - Type Certificate Number: E-205

Make: Teledyne

Model: A-65-1,A-65-3,A-65-6,A-65-7,A-65-8,A-65-9, A-65-12,A-65-14

Description of Type Design Change:
Installation of Superior Air Parts, Inc. Millennium series Cylinder Power Assemblies Part Number SA65000-A20P in accordance with Superior Air Parts, Inc. Service Letter No. 95-009, dated 06/30/95, or later FAA approved revision.

Limitations and Conditions: Installation of Superior Air Parts Cylinder assemblies must be installed in complete sets of four and can not be intermixed with the Teledyne cylinder assemblies. An Airframe STC is not required for installation of an engine modified by this STC. Compatibility of this design change with previously approved modifications must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 30, 1993

Date of issuance: March 13, 1995

Date reissued:

Date amended:

FEDERAL AVIATION ADMINISTRATION

By direction of the Administrator

(Signature)

A. J. Merrill
Manager, Special Certification Office
Southwest Region

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA Form 8110-2(10-68)

This certificate may be transferred in accordance with FAR 21.47.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Southwest Region
Arkansas, Louisiana,
New Mexico, Oklahoma,
Texas

Fort Worth, Texas 76193-0000

OCT 05 1995

Mr. Scott Sedgwhick
Superior Air Parts, Inc.
P. O. Box 363
Addison, TX 75001

Dear Mr. Sedgwhick:

Enclosed is amended Supplemental Type Certificate (STC) SE09014SC, Rev. 1, dated September 15, 1995, for the installation of Teledyne Continental A-65-1, A-65-3, A-65-6, A-65-7, A-65-8, A-65-9, A-65-12, A-65-14 engines. The revision is to include Superior Air Parts, Inc. Drawing No. SA65000SO, I.R., dated 2/24/95. This STC represents official FAA approval of an alteration and may be used to authorize identical installations on other aircraft. A copy of this STC should be provided with each installation. Instructions necessary for an installer to complete and inspect this alteration must be provided with parts shipments. Modified aircraft should be returned to service by means of an FAA Form 337 which refers to this STC.

You have the responsibility to report failures, malfunctions, or defects in any product or part manufactured by you that has resulted or could result in any of the occurrences listed in Federal Aviation Regulation (FAR) Part 21.3(c). Notify the Manager, Rotorcraft Directorate, (817) 222-5100, within 24 hours by telephone. Written notification to the Rotorcraft Directorate, Fort Worth, Texas 76193-0100 is also required. FAA Form 8330-2 (Malfunction or Defect Report) or any other appropriate format is acceptable in transmitting the required details.

If you plan to manufacture replacement or modification parts for sale, you must comply with FAR Parts 21.303 and 45.15. A Parts Manufacturer Approval (PMA) may be issued under the provisions of FAR 21.303(d) when you submit a statement certifying that you have established a fabrication inspection system as required by FAR 21.303(h). Your statement may be in letter form, with a reference to the STC number, and should be mailed to: Manager, Manufacturing Inspection Office, Department of Transportation, Federal Aviation Administration, Fort Worth, Texas 76193-0180.

This STC may be transferred or otherwise made available to another party by means of a licensing agreement in accordance with FAR 21.47. You are requested to advise this office within 30 days when you transfer or grant license rights to the STC.

Sincerely,

A. J. Merrill, Manager
Special Certification Office,
Aircraft Certification Service

Enclosure

U.S. Department
of Transportation
**Federal Aviation
Administration**

Southwest Region
Arkansas, Louisiana,
New Mexico, Oklahoma,
Texas

Fort Worth, Texas 76193-0000

AUG 2 9 1995

Mr. Scott Sedgwhick
Superior Air Parts, Inc.
14280 Gillis Road
Dallas, TX 75244-3792

Dear Mr. Sedgwhick:

We have completed our evaluation of your Supplemental Type Certificate (STC) project, FAA Project Number ST2416SC-E, and find that you have satisfactorily demonstrated compliance with the applicable certification regulations. Accordingly, we have enclosed STC SE09014SC, which indicates our approval of the installation of modified cylinder assembly on Teledyne Continental A-65 engines.

This STC is official Federal Aviation Administration (FAA) approval of your installation and may be used to authorize identical installations on other aircraft of the same model, subject to the limitations noted on the certificate. It may be transferred or otherwise made available to another party by means of a licensee arrangement in accordance with Federal Aviation Regulation (FAR) 21.47. You are required to advise this office within 30 days after the transfer when you transfer or grant licensee rights to the STC in order that we may take the necessary recording or reissuance action.

As recipient of this approval, except as provided in FAR 21.3(d), you are required to report any failure, malfunction, or defect in any product or part manufactured by you that you have determined has resulted or could result in any of the occurrences listed in FAR 21.3(c). The report should be communicated initially by telephone to the Manager, Rotorcraft Directorate, (817) 222-5100, within 24 hours after it has been determined that the failure has occurred. In addition, written notification to the Manager, Rotorcraft Directorate, Fort Worth, Texas 76193-0100 is also required. FAA Form 8330-2 (Malfunction or Defect Report) or any other appropriate format is acceptable in transmitting the required details.

If you plan to manufacture replacement or modification parts for sale in conformance with approved data listed on the Certificate, you are required to comply with FAR 21.303. A Parts Manufacturer Approval (PMA) may be issued under the provisions of FAR 21.303(d) when you submit a statement certifying you have established the fabrication inspection system as required by FAR 21.303(h). The identification requirements for parts produced under a PMA are in FAR 45.15. Your statement may be in letter form, with reference to STC SE09014SC, and should be addressed to the Federal Aviation Administration, Manager, Manufacturing Inspection Office, Fort Worth, Texas 76193-0180

Sincerely,

A. J. Merrill, Manager
Special Certification Office,
Aircraft Certification Service

Enclosure

United States of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE09014SC

This Certificate issued to Superior Air Parts, Inc.
14280 Gillis Road
Dallas, TX 75244-3792

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 13 *of the* Civil Air *Regulations.*

Original Product - Type Certificate Number: E-205

Make: Teledyne

Model: A-65-1,A-65-3,A-65-6,A-65-7,A-65-8,A-65-9, A-65-12,A-65-14

Description of Type Design Change:
Installation of Superior Air Parts, Inc. Millennium series Cylinder Power Assemblies Part Number SA65000-A20P in accordance with Superior Air Parts, Inc. Service Letter No. 95-009, dated 06/30/95, or later FAA approved revision.

Limitations and Conditions: Installation of Superior Air Parts Cylinder assemblies must be installed in complete sets of four and can not be intermixed with the Teledyne cylinder assemblies. An Airframe STC is not required for installation of an engine modified by this STC. Compatibility of this design change with previously approved modifications must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 30, 1993
Date of issuance: March 13, 1995

Date reissued:
Date amended:

FEDERAL AVIATION ADMINISTRATION

By direction of the Administrator

A. J. Merrill
(Signature)
A. J. Merrill
Manager, Special Certification Office
Southwest Region

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA Form 8110-2(10-68)

This certificate may be transferred in accordance with FAR 21.47.

United States Of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE8193SW

This Certificate issued to Superior Air Parts, Inc.
621 South Royal Lane
Coppell, TX 75019

certifies that the change in the type design for the following product with the limitations and conditions thereof as specified hereon meets the airworthiness requirements of Part 13 *of the* Civil Air Regulations.

Original Product Type Certificate Number: See page 2

Make: Textron Lycoming

Model: See page 2

Description of Type Design Change: Grind nitrided high compression cylinder barrels to plus .010 oversize and install SL75089 P10 Piston, SL74241 P10 Compression Ring, and SL 73857 P10 Oil Ring in accordance with Superior Air Parts, Inc., Service letter No. L92-03 D dated July 10, 2008 or latter FAA approved revisions.

Limitations and Conditions: Plus 10 piston and piston rings should be installed in complete engine sets (All cylinders). The installer must determine whether this design change is compatible with previously approved modifications. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: June 27, 1991

Date of issuance: April 27, 1992

Date reissued:

Date amended: July 31, 2008

By direction of the Administrator

(*Signature*)
S. Frances Cox, Manager
Special Certification Office
Southwest Region

(*Title*)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

 This certificate may be transferred in accordance with FAR 21.47.

nited States Of America

Department of Transportation - Federal Aviation Administration

Supplement Type Certificate

(Continuation Sheet)

Number SE8193SW

Date of Issuance: April 27, 1992

Date of Amendment: July 31, 2008

The following engines and their respective Type Certificate Numbers are eligible for this installation:

Type Certificate Number E-274 –

O-320-A2C, -B1A, -B1B, -B2A, -B2B, -B2C, -B2D, -B2E, -B3A, -B3B, -B3C, -D1A, -D1B, -D1C, -D1D, -D1F, -D2A, -D2B, -D2C, -D2F, -D2G, -D2H, -D2J, -D3G.

Type Certificate Number 1E12 –

IO-320-B1A, -B1B, -B1C, -B1D, -B1E, -B2A, -C1A, -C1B, -D1A, -D1B, -D1C, -F1A
LIO-320-B1A, -C1A
AIO-320-A1A, -A1B, -A2A, -A2B, -B1B, -C1B
AEIO-320-D1B, -D2B

Type Certificate Number E-277 –

O-340-A1A, -A1B, -A2A

Type Certificate Number E-286 –

O-360-A1A, -A1AD, -A1C, -A1D, -A1F, -A1F6, -A1F6D, -A1G, -A1G6, -A1G6D, -A1H, -A1H6, -A1LD, -A1P, -A2A, -A2E, -A2F, -A2G, -A2H, -A3A, -A3AD, -A3D, -A4A, -A4AD, -A4D, -A4G, -A4J, -A4K, -A4M, -A4N, -A4P, -A5AD, -C1A, -C1C, -C1E, -C1F, -C1G, -C2A, -C2B, -C2C, -C2D, -C2E, -C4F, -C4P, -F1A6, -G1A6, -J2A
HO-360-A1A, -B1A, -B1B, -C1A
LO-360-A1G6D, -A1H6

Type Certificate Number 1E10 –

IO-360-B1A, -B1B, -B1C, -B1D, -B1E, -B1F, -B1F6, -B1G6, -B2E, -B2F, -B2F6, -B4A, -E1A, -F1A, -L2A, -M1A, -M1B
HIO-360-A1A, -B1B, -G1A
AEIO-360-AB1B, -B1D, -B1F, -B1F6, -B1G6, -B1H, -B2F, -B2F6, -B4A, -H1A, -H1B

Type Certificate Number 1E1 –

VO-360-A1A, -A1B, -B1A
IVO-360-A1A

Type Certificate Number E-295 –

O-540-A1A, -A1A5, -A1B5, -A1C5, -A1D, -A1D5, -A2B, -A3D5, -A4A5, -A4B5, -A4C5, -A4D5, -D1A5, -E4A5, -E4B5, -E4C5, -F1A5, -F1B5, -G1A5, -G2A5, -H1A5, -H1A5D, -H1B5D, -H2A5, -H2A5D, -H2B5D, -L3C5D

Type Certificate Number 1E4 –

IO-540-C1B5, -C1C5, -C2C, -C4B5, -C4B5D, -C4C5, -C4D5, -C4D5D, -D4A5, -D4B5, -D4C5, -J4A5, -N1A5, -R1A5, -T4A5D, -T4B5, -T4B5, T4B5D, T4B5D, T4C5D, V4A5, -V4A5D
AEIO-540-D4A5, -D4B5, -D4C5, -D4D5

Type Certificate Number E14EA –

TIO-540-G1A

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional Office of the transfer of the Supplemental Type Certificate.

The FAA will reissue the certificate in the name of the transferee and forward it to him.

TRANSFER ENDORSEMENT

Transfer the ownership of Supplemental Type Certificate Number _____

to *(Name of transferee)* _____

(Address of transferee) _____
(Number and street)

_____
(City, State, and ZIP code)

from (*Name of grantor*)(*Print or type*) _____

(*Address of grantor*) _____
(Number and street)

_____
(City, State, and ZIP code)

Extent of Authority (if licensing agreement): _____

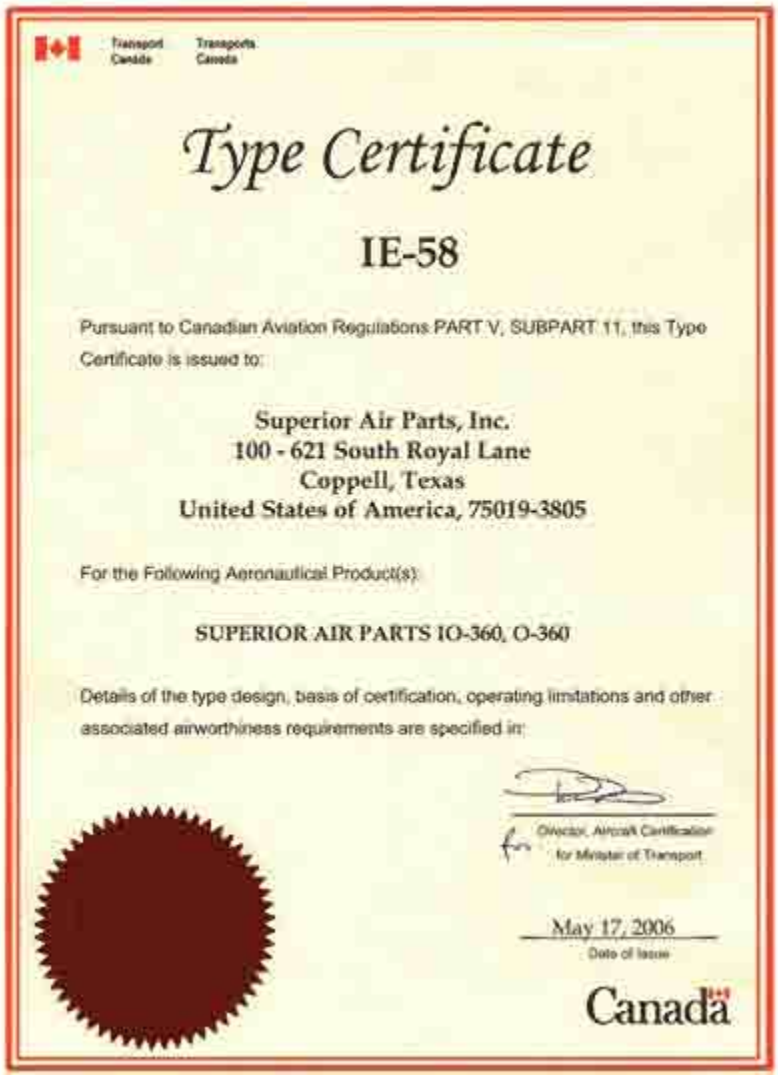
_____

_____

_____

Date of Transfer: _____

Signature of grantor (*In ink*): _____



Transport Canada Transports Canada

Type Certificate

IE-58

Pursuant to Canadian Aviation Regulations PART V, SUBPART 11, this Type Certificate is issued to:

Superior Air Parts, Inc.
100 - 621 South Royal Lane
Coppell, Texas
United States of America, 75019-3805

For the Following Aeronautical Product(s):

SUPERIOR AIR PARTS IO-360, O-360

Details of the type design, basis of certification, operating limitations and other associated airworthiness requirements are specified in:

for Director, Aircraft Certification
for Minister of Transport

May 17, 2006
Date of Issue

Canada

Department of Transportation

Federal Aviation Administration

ENGINE

Type Certificate

Number E00001SC

This certificate issued to Superior Air Parts, Incorporated

certifies that the type design for the following product with the operating limitations and conditions therefor as specified in the Federal Aviation Regulations and the Type Certificate Data Sheet, meets the airworthiness requirements of Part 33 of the Federal Aviation Regulations.

Models
O-360
IO-360

This certificate, and the Type Certificate Data Sheet which is a part hereof, shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: July 17, 2001

Date of issuance: March 31, 2004

By direction of the Administrator.

(Signature) S. Francis Cox

(Title) Manager, Special Certification Office
Southwest Region

This certificate may be transferred if endorsed as provided on the reverse hereof.

Any alteration of this certificate and/or the Type Certificate Data Sheet is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8100-8 (12-80)

Department of Transportation

Federal Aviation Administration

ENGINE

Type Certificate

Number E00001SC

This certificate issued to Superior Air Parts, Incorporated

certifies that the type design for the following product with the operating limitations and conditions therefor as specified in the Federal Aviation Regulations and the Type Certificate Data Sheet, meets the airworthiness requirements of Part 33 of the Federal Aviation Regulations.

Models
O-360
IO-360

This certificate, and the Type Certificate Data Sheet which is a part hereof, shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: July 17, 2001

Date of issuance: March 31, 2004

By direction of the Administrator.

(Signature) S. Francis Cox

(Title) Manager, Special Certification Office
Southwest Region

This certificate may be transferred if endorsed as provided on the reverse hereof.

Any alteration of this certificate and/or the Type Certificate Data Sheet is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8100-8 (12-87)

European Aviation Safety Agency

TYPE CERTIFICATE

EASA.(IM).E.024

This certificate, established in accordance with Regulations (EC) No 1592/2002 and (EC) No 1702/2003 and issued to

Superior Air Parts, Inc.

621 South Royal Lane, Suite 100
Coppell
Texas 75019-3805
USA

certifies that the engine type designs listed below comply with the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified on the associated Type Certificate Data Sheet N°. (IM).E.024

Model	Date of issue
O-360	02 November 2006
IO-360	02 November 2006

This certificate and its associated type-certificate data sheet, which is a part thereof, shall remain valid unless otherwise surrendered or revoked.

For the European Aviation Safety Agency,

K. Böwing

Klaus Böwing
Certification Manager Propulsion
Certification Directorate

The United States of America

Department of Transportation

Federal Aviation Administration

ENGINE

Type Certificate

Number E00001SC

This certificate issued to Superior Air Parts, Incorporated

certifies that the type design for the following product with the operating limitations and conditions therefor as specified in the Federal Aviation Regulations and the Type Certificate Data Sheet, meets the airworthiness requirements of Part 33 of the Federal Aviation Regulations.

Models
O-360
IO-360

This certificate, and the Type Certificate Data Sheet which is a part hereof, shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: July 17, 2001

Date of issuance: March 31, 2004

By direction of the Administrator.

(Signature) S. Frances Cox

(Title) Manager, Special Certification Office
Southwest Region

This certificate may be transferred if endorsed as provided on the reverse hereof.

Any alteration of this certificate and/or the Type Certificate Data Sheet is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA FORM 8110-2 (2-80)

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Agency Certificate

Number **5SPR667Y**

This certificate is issued to

Superior Air Parts, Inc.

whose business address is

621 South Royal Lane, Suite 100 Coppell, TX 75019-3805

upon finding that its organization complies in all respects with the requirements of the Federal Aviation Regulations relating to the establishment of an Air Agency, and is empowered to operate an approved

with the following ratings:

Limited Powerplant

This certificate, unless canceled, suspended, or revoked, shall continue in effect **indefinitely**

By direction of the Administrator

Date issued:

June 12, 2007

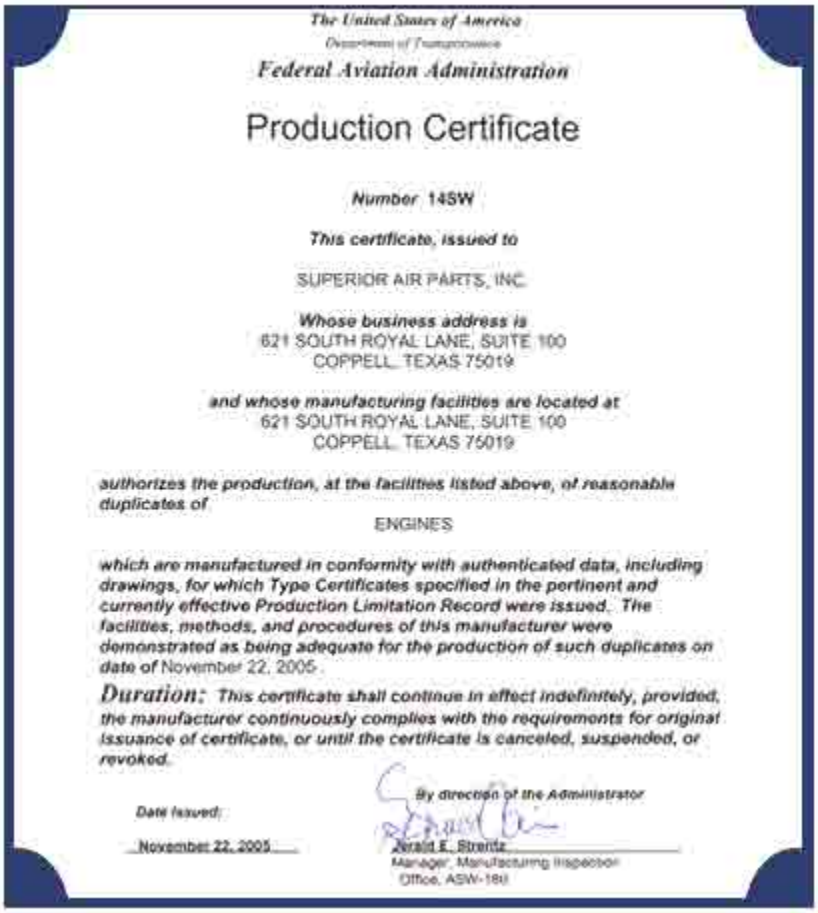
Lewis C. Gonzales Jr.

Manager, Dallas FSDO-05

This Certificate is not Transferable, AND ANY MAJOR CHANGE IN THE BASIC FACILITIES, OR IN THE LOCATION THEREOF, SHALL BE IMMEDIATELY REPORTED TO THE APPROPRIATE REGIONAL OFFICE OF THE FEDERAL AVIATION ADMINISTRATION

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both

FAA Form 8000-4 (1-67) SUPERSEDES FAA FORM 390. AFS Electronic Forms System - 32 2



The United States of America
Department of Transportation
Federal Aviation Administration

Production Certificate

Number 14SW

This certificate, issued to

SUPERIOR AIR PARTS, INC.

Whose business address is
621 SOUTH ROYAL LANE, SUITE 100
COPPELL, TEXAS 75019

and whose manufacturing facilities are located at
621 SOUTH ROYAL LANE, SUITE 100
COPPELL, TEXAS 75019

authorizes the production, at the facilities listed above, of reasonable duplicates of

ENGINES

which are manufactured in conformity with authenticated data, including drawings, for which Type Certificates specified in the pertinent and currently effective Production Limitation Record were issued. The facilities, methods, and procedures of this manufacturer were demonstrated as being adequate for the production of such duplicates on date of November 22, 2005.

Duration: ***This certificate shall continue in effect indefinitely, provided, the manufacturer continuously complies with the requirements for original issuance of certificate, or until the certificate is canceled, suspended, or revoked.***

By direction of the Administrator

Date Issued:

November 22, 2005

Gerald E. Strentz
Manager, Manufacturing Inspection
Office, ASW-181